Xvision™

HD 960H

Professional HD 960H Vandal Resistant Eyeball Dome Camera

User Manual

Thank you purchasing the XC960VV camera from Xvision.

Please ensure that you read and understand this User Guide before operating the camera.

Please store this User Guide in an easily accessible location.

Version 1

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Safety Precautions

1. Do not install the equipment in an environment with too much moisture, dust or smoke dust as this may result in fire or electric shock.

2. In the unlikely event that the equipment should malfunction and emit an abnormal smell or smoke, please immediately stop it, shut off the power and contact your supplier.

3. Please do not place this equipment near a heat source to avoid risk of fire.

4. Please do not store, install and use this product in danger areas with inflammable or explosive substances.

5. Please make sure the power is turned off when installing the product.

6. Please ensure that you install the camera in an area with good ventilation.

7. When installing the camera, please make sure that it does not face any objects giving out strong lights as this will damage the CCD of the camera.

8. Please do not use the camera in an environment where temperatures exceed either -20°C to +55°C.

1. Product Overview

Thank you for purchasing the HD 960H XC960VV from Xvision. Please read through this manual carefully and make sure you understand before operating the camera.

1.1 Features

- Up to 30-40m Smart IR Night Vision
- Sony 960H CCD Sensor
- Xvision X3K DSP
- Xvision 2.8 to 12mm HD Megapixel Auto Iris Lens for viewing angle between 23 to 92°
- Advanced Wide Dynamic Range
- High Speed Digital Slow Shutter
- 3D Digital Noise Reduction
- Programmable High Light Suppression
- Vandal Resistant
- Designed for Wall or Ceiling Mount
- Waterproof to IP66

1.2 Package Contents

The packaged box for the XC960VV comes with the following items:

- XC960VV Camera
- Screws / Wall Plugs
- Allen Key
- DC Plug with screw terminals
- User Manual

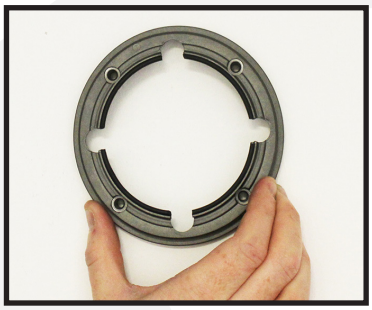
Should any of these items be missing, please contact your local distributor.

2. Installation

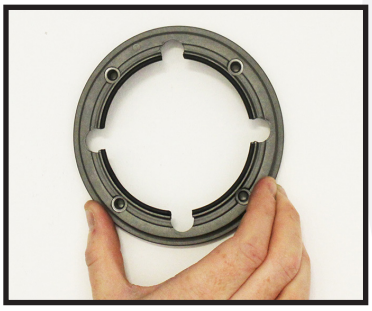
The XC960VV camera can be wall or ceiling mounted. To install the camera, please follow the steps below.

1. Unscrew the base of the camera by holding the bottom and moving the ring anti-clockwise.

2. Use the camera base as a template and mark out the holes in the wall/ceiling where you wish to install the camera.



3. Get the correct drill bit for the type of wall you are drilling, then drill the holes in the wall and insert the wall plugs into the holes.

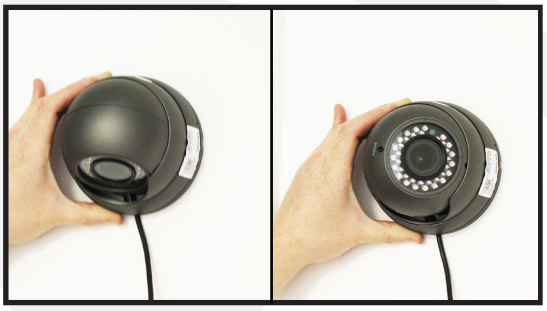


4. Take the base and feed through the camera wires. (You can drill a hole through the centre of the base and feed the wires through the wall/ceiling. But for this example we have just fed through the base for the cable to be external).

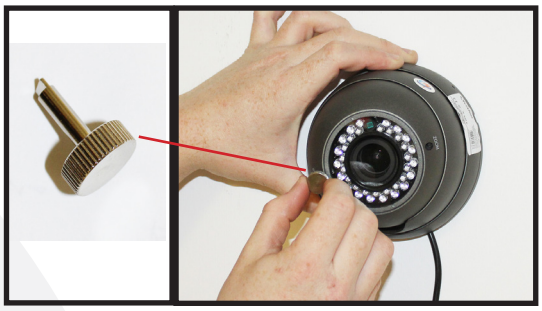
5. Screw the camera base into the wall or ceiling.

6. Screw the bracket and camera back onto the base by turning the ring clockwise. Please don't tighten completely if you wish to change the camera angle.

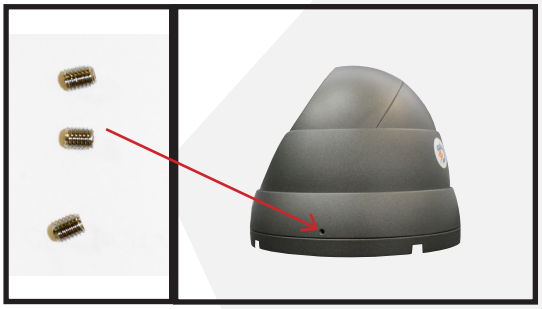
7. Adjust the camera angle to the desired view. It would be advised to use a test monitor when choosing the angle, to get the perfect angle for your application.



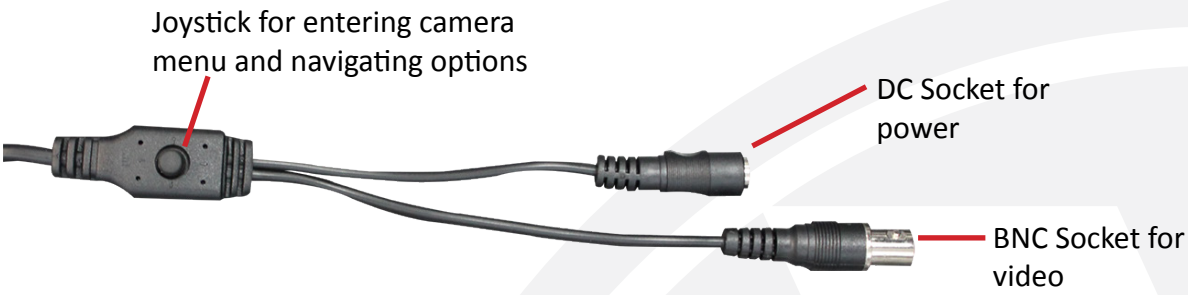
8. You can adjust the focus and zoom on the camera using the tool provided. To adjust, simply turn the screw marked ‘focus’ or ‘zoom’ to adjust the view. Insert the tool into the slots on the face of the camera.



9. Finally, tighten the bracket, and secure using the thread screws provided in the installation pack.



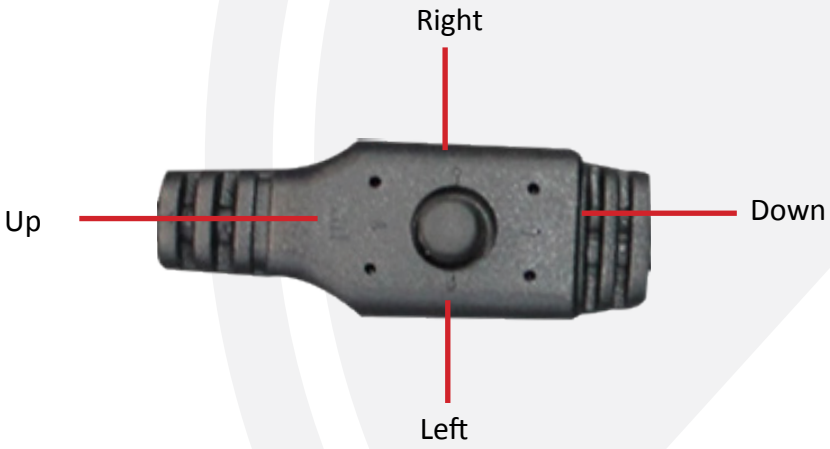
3. How to Operate the Camera



To operate the camera, firstly you will need to connect the BNC and DC sockets to the BNC and DC sockets of a power supply and DVR or Monitor. If you wish to extend the cables, you can connec the DC and BNC Sockets to the BNC/DC of a PNP cable/RG59 cable.

You can then connect the DC socket to a 12V DC Power Supply and the BNC socket to back of your compatible DVR or monitor.

4. Camera Menu



To access the camera menu, when the camera is on press the joystick button in. When the menu has appeared, you will be presented with the following options:

- Lens
- Exposure
- White Balance
- Backlight
- D/N (Day/Night)
- DPC
- Special

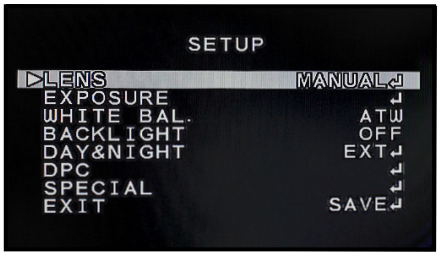
4.1 Lens Option: DC / Manual

Select the lens type from either DC or Manual. Use the joystick to navigate between the options and when on the desired option, press the joystick in to select. Both options have a sub-menu as follows:

DC: Brightness - adjust the brightness of the image between 0-255. Iris Speed - adjust the iris speed between 0-255.

Manual: Brightness - adjust the brightness of the image between 0-255.

Return: Save / End and return to the previous menu.

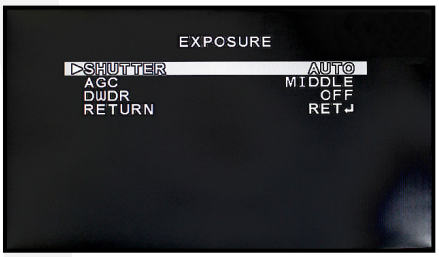


4.2 Exposure Option: Shutter / AGC / DWDR

The exposure menu allows you to adjust the shutter speed, Automatic Gain Control (AGC) and the Digital Wide Dynamic Range (DWDR) on the camera.

Shutter: Adjust the shutter speed to auto or choose from the following shutter speeds (1/25, FLK, 1/50, 1/100, 1/2000, 1/5000, 1/10000).
AGC: Adjust the AGC to either Auto, Low, Middle or High.
DWDR: Turn the DWDR on or off. If you choose to turn it on, you can adjust the sensitivity level (0-63).

Return: Save / End and return to the previous menu.

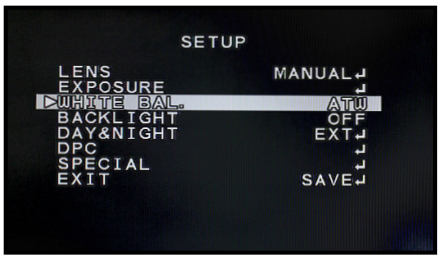


4.3 White Balance Option: AWB / ATW / Anti CRL / Manual

Adjust the White Balance and set the Automatic White Balance (AWB), ATW, Anti Colour Rolling (Anti CRL) and choose to set the white balance manually.

AWB: Set the white balance to Automatic
ATW: Turns this function on so the camera will detect the colour temperature automatically.
Anti CRL: Turn on the anti colour rolling function
Manual: Set the white balance to manual. If this option is chosen, you will need to adjust the colour temperature. To do this, adjust the colour temperature from Manual, Indoor or Outdoor. In each of these options you will need to set the blue and red gain.

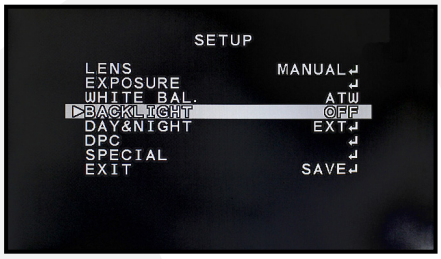
Return: Save / End and return to the previous menu.



4.4 Backlight **Option: Off / BLC / HLC**

This option allows you adjust the advance backlight settings, giving the following options; Backlight Compensation (BLC), Highlight Compensation (HLC), Day/Night, Black & White mode, EXT and Colour Mode.

BLC: Select this option to allow objects in front of bright lights to be seen clearer, by making the background darker. Once selected, you will be presented with a further 2 options; area select and state. Select the area gain control (30-255), Height, Width (both 0-13), Left/Right and Top/Bottom (Both 0-5). You can also turn the state on or off.
HLC: Select this option to mask bright areas in an image, for example, car headlights. Once selected, you can set the sensitivity level (0-240), set HLC to All Day or Mask Skip. If you select Mask Skip, you can set the height, width, left/right and top/bottom of the masked areas between 0-15 values.

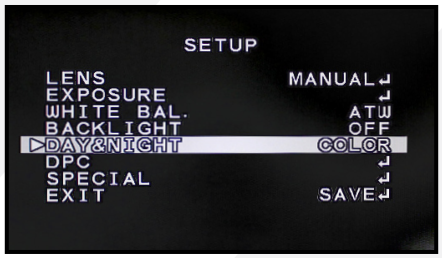


4.5 Day/Night **Option: D&N Auto / B&W / EXT / Colour**

Day/Night: Set the camera to Day/Night mode. When selected, you can set the Day/Night mode to Auto, Black and White, EXT or Colour.

D/N Auto: When choosing Auto you can adjust the lux level from which the camera will switch from day to night mode (0-255) and the delay from when the camera reaches that lux level to turn to night mode (0-30). You can also do this from night to day.
B/W: When choosing B/W you will put the cameras image to black and white. You can also choose to turn on the burst function, turn on the IR Smart and set the IR level.
EXT: Choose the EXT function to set the day to night function to be decided by external signals, for example IR LEDs. Set the delay to (0-30 seconds) and night to day function delay (0-30 secs).
Colour: Set the camera's image to colour.

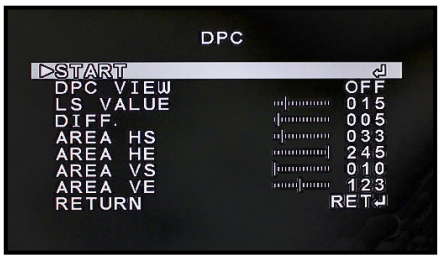
Return: Save / End and return to the previous menu.



4.6 DPC **Option: Start / DPC View / LS Value / Diff / Area**

Start: Once selected, you will be asked to cover the lens and press the joystick in. Please note that this is for factory use only, if initiated power the camera down and then power the camera to back up.
DPC View: Turn the DPC View on or off.
LS Value: Set the shutter value for searching dead pixels
Diff: Set the diff. value for searching dead pixels
Area: Set the area of the DPC. There are areas to adjust; HS, HE, VS and VE (0-255).

Return: Save / End and return to the previous menu.



4.7 Special **Option: Camera Title / Motion / Privacy / Park Line / Image Adjust Cam Adjust / Display ID / Language / Version**

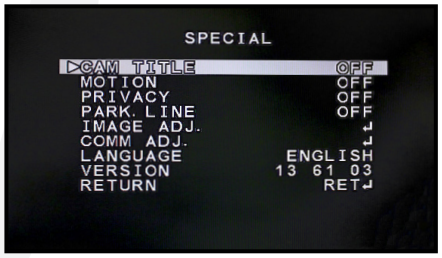
The special option allows you to adjust various settings on the camera from camera title, privacy masking, motion detection and language etc.

Camera Title: Turn the camera title on or off. When choosing on, you will be presented with an on screen keyboard to set the camera title. Move the joystick to navigate between the letters/numbers and then press the joystick in to confirm selection.
Motion: Turn the motion detection function on or off.
If set to on, you will be presented with the following options:

- **Area Select**: Select 1-4 areas
- **Area State:** Turns the selected motion zone on or off
- **Height:** 0-50
- **Width:** 0-50
- **Top:** 0-50
- **Bottom:** 0-50
- **Degree:** 0-255
- **View:** On or off

Privacy: Turn the privacy function on or off. If set to on, you will be presented with the following options:

- **Area Select**: Select 1-8 areas
- **Area State:** Turns the selected privacy zone on or off
- **Height:** 0-255
- **Width:** 0-255
- **Left/Right**: 0-255
- **Top/Bottom:** 0-255
- **Colour:** 0-15 - choose between 15 colour options to show the masked areas.



4.7 Special Continued...

Park Line: Turn the park line function on or off. This feature all the user to set on-screen parking lines for vehicle use. If turned on, you will be presented with the following options to adjust the parking lines' position and width:

LT: 0-255
LB: 0-255
RT: 0-255
RB: 0-255
F: 0-255
N: 0-255
T: 0-15
V1: 0-255
V2: 0-255
V3: 0-255

Image Adjust: The image adjust options allows you to change various settings to create the perfect image for your needs. When entering the image adjust option, you will be presented with the following sub-menu.

Lense Shadow: Sets the amount of light available to the lense to provide clearer images. Turn this function and you can alter the light level (0-255), H-centre (0-255) and V-centre (0-255).
2DNR: Turn on to activate the Dynamic Noise Reduction function. When turned on, you can set the level from 0-255.
Mirror: Provides a mirror reflection (horizontal) of the image. This function can be turned on or off.
Font Colour: Change the font colour for the on-screen display. When turned on you can choose between 15 colours and the ID/Title of the camera.
Contrast: Adjust the contrast colour (0-255)
Sharpness: Adjust the sharpness of the image (0-255)
Display: Choose the display from LCD, User, CRT or Neg Image. The LCD option allows you to adjust Gamma (0.3 - 1.0), Ped Level (0-63) and Colour Gain (0-255). The user option allows you to adjust the same options as LCD and the CRT option allows you to adjust Ped Level (0-63) and Colour Gain (0-255).
Com Adjust: This feature is for RS485 settings. Here you can adjust the baudrate (2400, 4800, 9600), Protocol (Pelco D, Pelco P) and the Cam ID (1-255).
Display ID: Turn the ID of the camera on or off. If set to on, you can choose the on screen position of the ID.
Language: Set the language on the camera.
Version: View the current firmware version on the camera.

Return: Save / End and return to the previous menu.

Exit: Exit the menu and go back to camera view. You will be asked to either exit without saving,save the settings or reset the camera back to the factory settings.

5. Specifications

Model	XC960VV
Picture Type	Day/Night (B/W & Colour)
Image	1/3” SONY Super HAD II CCD 960H
Resolution	960H
Minimum Illumination	O Lux (IR On)
Night Vision	20-30m IR Night Vision
Lens	2.8 - 12mm
Motion Detection	Yes
Mirrored Image	Yes
OSD Functions	Automatic White Balance Automatic Gain Control Backlight Compensation Digital Wide Dynamic Range Digital Noise Reduction
Power Supply	DC 12V ± 10%
Consumption	450mA DC 12V (IR On)
Operation Temperature	-20°C ~ 55°C
Dimensions in mm (WxHxD)	95x120x95
Weight (Kg)	0.82
Weatherproof	IP66

For more information, please contact our technical team. Contact details are on the back page.

Notes

Manufactured exclusively for:

Xvision™

HD 960H

www.xvision.com

UL CE RoHS Compliant

TECHNICAL SUPPORT

For technical support, please contact your local distributor.

Alternatively, call 0871 222 1430.

LIMITED WARRANTY

This product is supplied with a 12 month warranty. The warranty excludes products that have been misused (including accidental damage) and damage caused by normal wear and tear. In the unlikely event that you encounter a problem with this product, it should be returned to the place of purchase.

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www.xvision.com